

REMARKS

The final Office Action mailed June 8, 2006 has been carefully reviewed and the foregoing amendments have been made in consequence thereof.

Claims 1, 2, 4, 5 and 7-19 are now pending in this application. Claims 1, 2 and 4-18 stand rejected. Claim 6 has been canceled. Claim 19 is newly added. No additional fee is due for newly added Claim 19.

Applicant wishes to thank the Examiner for the courtesies extended during the telephone interview conducted by Applicant's representative Eric T. Krischke on September 28, 2006. During the interview, Applicant's representative and the Examiner discussed differences between the cited prior art references and the present invention. However, no agreement was reached regarding claim amendments to overcome the current rejections based on the cited prior art references.

The rejection of Claims 1, 2 and 4-18 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement is respectfully traversed.

The Examiner alleges at paragraph 2 of the Office Action that the recitation of "said body comprising a substantially planar surface" is not disclosed in the specification or shown in the drawings. In an effort to further examination, Applicant has amended independent Claims 1 and 11 with traverse to delete such recitation. In view thereof, the rejection to Claims 1, 2 and 4-18 is believed to be moot and notification to that effect is requested.

The objection to Claim 13 due to informalities is respectfully traversed.

Applicant has amended Claim 13, as suggested by the Examiner. Applicant requests that the objection to Claim 13 be withdrawn.

The rejection of Claims 1, 2, 4-6, 9, 11-13, 16 and 18 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,256,456 to Wallshein (hereinafter referred to as "Wallshein") is respectfully traversed.

Wallshein describes a tooth separator device having a coil spring portion (1) with each end of the coil spring portion terminating at a leg (2, 3). The device is installed between adjacent teeth by piercing the embrasure between the teeth (6, 7) with a bent-over portion (4). Legs (2, 3) are moved to "wind" the spring and bent-over portion (5) is inserted into the

embrasure by piercing the embrasure. Due to the tendency of the spring to “unwind”, bent-over portions (4, 5) exert a separating force on the side walls of teeth (6, 7) so as to cause tooth (7) to be uprighted and de-impacted. The embodiment shown in Figure 11 is installed in an identical fashion to separate teeth (6, 7) as described above, i.e., the device is bent in torsion such that the legs spread to separate tooth (7) from tooth (6). Notably, Wallshein does not describe or suggest an apparatus comprising a wire having a body that is movable from the activated position to a static position such that wire applies a substantially constant force to the tooth as the body moves from the activated position to the static position to urge the second end toward the first end. As such, Wallshein does not describe or suggest a wire that induces an eruptive force that facilitates treatment of a tooth that is at least partially impacted.

Claim 1 recites an apparatus for facilitating treatment of a tooth that is at least partially impacted, wherein the apparatus comprises “a wire comprising a first end, a second end, and a substantially planar body extending therebetween, said body having a substantially uniform thickness and movable between an activated position and a static position, said first end configured to couple to a tooth that is at least partially impacted, with said body deformed to the activated position, said second end configured to secure said apparatus relative to the tooth, such that said wire applies a substantially constant force to the tooth as said body moves from the activated position to the static position to urge said second end toward said first end.”

Wallshein does not describe or suggest an apparatus as recited in Claim 1. More specifically, Wallshein does not describe or suggest an apparatus having a wire, such that with the wire body deformed to the activated position, the wire applies a substantially constant force to the tooth as the body moves from the activated position to the static position to urge the second end toward the first end, as required by Applicant’s claimed invention. Rather, in contrast to the present invention, Wallshein describes a device that is bent in torsion such that the legs of the device spread to separate adjacent teeth. Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over Wallshein.

Claim 6 has been canceled. Claims 2, 4, 5 and 8 depend from independent Claim 1. When the recitations of Claims 2, 4, 5 and 8 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 2, 4, 5 and 8 are likewise patentable over Wallshein.

Claim 11 recites a method for treating a tooth that is at least partially impacted. The method comprises “coupling a first end of a wire to an impacted tooth, the wire having a substantially planar body extending between the first end and a second end, wherein the body has a substantially uniform thickness and is movable between an activated position and a static position; and coupling the wire second end to an anchoring device with the body deformed to the activated position such that the wire applies a substantially constant force to the impacted tooth as the body moves from the activated position to the static position to urge the second end toward the first end.”

Wallshein does not describe or suggest a method as recited in Claim 11. More specifically, Wallshein does not does not describe or suggest a method including “coupling the wire second end to an anchoring device with the body deformed to the activated position such that the wire applies a substantially constant force to the impacted tooth as the body moves from the activated position to the static position to urge the second end toward the first end,” as required by Applicant’s claimed invention. Rather, in contrast to the present invention, Wallshein describes a device that is bent in torsion such that the legs of the device spread to separate adjacent teeth. Accordingly, for at least the reasons set forth above, Claim 11 is submitted to be patentable over Wallshein.

Claims 12, 13, 16 and 18 depend from independent Claim 11. When the recitations of Claims 12, 13, 16 and 18 are considered in combination with the recitations of Claim 11, Applicant submits that dependent Claims 12, 13, 16 and 18 likewise are patentable over Wallshein.

For at least the reasons set forth above, Applicant respectfully requests the Section 102 rejection of Claims 1, 2, 4-6, 8, 11-13, 16 and 18 be withdrawn.

The rejection of Claims 1, 2, 4-6, 8, 9, 11-13 and 16-18 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,127,677 to Schachter (hereinafter referred to as “Schachter”) in view of U.S. Patent No. 5,246,366 to Tracey (hereinafter referred to as “Tracey”) is respectfully traversed.

Schachter describes a space maintainer to limit migration of teeth into an edentulous area of the mouth. A band (1) having a strap (2) secured to an outer surface of the band is positioned about a tooth adjacent a space. With terminal portions (15, 16) of the space maintainer (7) secured to the band, pressure is applied to intermediate portions (14, 15) of the

space maintainer at points and directions as indicated by arrows (20, 21) to straighten member (7) to assume a position as indicated by the dotted lines in Figure 4 to maintain a space left by missing teeth. Notably, Schachter does not describe or suggest an apparatus comprising a wire having a body that is movable from the activated position to a static position such that wire applies a substantially constant force to the tooth as the body moves from the activated position to the static position to urge the second end toward the first end. As such, Schachter does not describe or suggest a wire that induces an eruptive force or that facilitates treatment of a tooth that is at least partially impacted.

Tracey describes an orthodontic retraction spring (20) having a stem portion (22) for engaging a vertically oriented slot (26) in a first tooth bracket (28) coupled to a first tooth in the arch, and a shank portion (36) for engaging an auxiliary passage (40) formed in a second tooth bracket (42) configured as a molar bracket in the arch. As such, Tracey does not describe or suggest a wire that induces an eruptive force or that facilitates treatment of a tooth that is at least partially impacted.

Applicant respectfully submits that the Section 103 rejection of Claims 1, 2, 4-6, 8, 9, 11-13 and 16-18 as being unpatentable over Schachter in view of Tracey is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. In contrast to the assertion within the Office Action, Applicant respectfully submits that it would not be obvious to one skilled in the art to combine Schachter with Tracey because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicant's own teaching. Rather, only the conclusory statement that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the substantially planar surface of Tracey as understood to mean the cross-sectional shape of the body in order to easily handle and conform the apparatus" suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicant's disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art,

and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the prior art disclosures, or any reasonable expectation of success has been shown.

Moreover, as is well established, the mere fact that the prior art structure could be modified does not make such a modification obvious unless the prior art suggests the desirability of doing so. See In re Gordon, 221 U.S.P.Q.2d 1125 (Fed. Cir. 1984). Furthermore, the Federal Circuit has determined that:

[i]t is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention."

In re Fitch, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

Further, under Section 103, "it is impermissible ... to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art." In re Wesslau, 147 USPQ 391, 393 (CCPA 1965). Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the cited art, or any reasonable expectation of success has been shown. For example, there is no suggestion or motivation within either Schachter or Tracey to replace the space-maintaining member (7) of Schachter with the body of Tracey. Accordingly, since there is no teaching or suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicant requests that the Section 103 rejection of Claims 1, 2, 4-6, 8, 9, 11-13 and 16-18 be withdrawn.

Moreover, if art "teaches away" from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard,

it is respectfully submitted that the cited art, as a whole, is not suggestive of the presently claimed invention. Specifically, Applicant respectfully submits that Schachter and Tracey teach away from the present invention, and as such, there is no suggestion or motivation to combine Schachter with Tracey. Specifically, in contrast to the present invention, Schachter describes applying pressure to intermediate portions of a space maintainer to straighten member to maintain a space left by missing teeth. Accordingly, Schachter teaches away from the present invention and, as such, any combination of the cited art appears to support the nonobviousness of the present invention.

Accordingly, for at least the reasons set forth above, Applicant respectfully requests the Section 103 rejection of Claims 1, 2, 4-6, 8, 9, 11-13 and 16-18 be withdrawn.

The rejection of Claims 7, 10, 14 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Wallshein in view of U.S. Patent No. 5,312,247 to Sachdeva et al. (hereinafter referred to as “Sachdeva”) is respectfully traversed.

Wallshein is described above.

Sachdeva describes an orthodontic appliance (10) used to move at least two teeth to desired positions and/or to expand a patient's midpalatal suture. The appliance includes a trans-palatal arch bar (14) that includes terminal ends (16) that are embedded in teeth-abutting members (18). The teeth-abutting members apply corrective forces induced by the arch bar to several teeth on opposite sides of the same patient's dental arch. As such, Sachdeva does not describe or suggest a wire that induces an eruptive force or that facilitates treatment of a tooth that is at least partially impacted.

Claims 7 and 10 depend from independent Claim 1, which is recited above. When the recitations of Claims 7 and 10 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 7 and 10, for at least this reason, are likewise patentable over Wallshein in view of Sachdeva.

Accordingly, for at least the reasons set forth above, Applicant respectfully requests the Section 103 rejection of Claims 7, 10, 14 and 15 be withdrawn.

Claims 14 and 15 depend from independent Claim 11, which is recited above. When the recitations of Claims 14 and 15 are considered in combination with the recitations of

Claim 11, Applicant submits that dependent Claims 14 and 15, for at least this reason, are likewise patentable over Wallshein in view of Sachdeva.

The rejection of Claims 7, 10, 14 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Schachter in view of Sachdeva is respectfully traversed.

Schachter and Sachdeva are described above.

Claims 7 and 10 depend from independent Claim 1, which is recited above. When the recitations of Claims 7 and 10 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 7 and 10, for at least this reason, are likewise patentable over Schachter in view of Sachdeva.

Claims 14 and 15 depend from independent Claim 11, which is recited above. When the recitations of Claims 14 and 15 are considered in combination with the recitations of Claim 11, Applicant submits that dependent Claims 14 and 15, for at least this reason, are likewise patentable over Schachter in view of Sachdeva.

Accordingly, for at least the reasons set forth above, Applicant respectfully requests the Section 103 rejection of Claims 7, 10, 14 and 15 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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